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Art. VIII.—*On some New Species of Victorian Marine Mollusca.*

BY

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AND

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(With Plates XIV., XV., XVI.).

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This paper contains descriptions of five new species of univalves and two new species of bivalves.

Eulima victoriae, sp. nov. (Pl. XIV., Fig. 1).

Shell small, thin, rather attenuated, subcylindrical, opaque-white, with a glossy surface. Whorls seven, commencing with a large, blunt, dome-shaped apex; the whorls are flatly convex, and of fairly regular increase. Suture scarcely discernible. Aperture ovate, pointed above. Labrum regularly curved, thin, and very prominent about the centre. The labium resolves itself into a rather broadly reverted lip.

Dimensions of type.—Length, 2.1; breadth, .6 mm.

Locality.—Dredged off Wilson's Promontory.

Observation.—The specific differentiation of this genus is one of the most difficult to study, requiring patient investigation; however, the cylindrical form and dome-shaped apex serve to distinguish the present shell from its Victorian congenors. The nearest approach is perhaps *E. fricata* Hedley from Tasman Sea. Rec. Aust. Mus. vi., 1907, p. 290, pl. lv., fig. 14.

Type in Mr. C. J. Gabriel's collection.

Leiostraca kilcundae, sp. nov. (Pl. XIV., Figs. 2 and 3).

Shell minute, light-brown colour, smooth, shining, sufficiently transparent to view the axial-pillar. It is tipped with a distinctly rounded dome-shaped apex. Following this are five flatly convex

whorls, parted by a linear suture. The colouration of the whorls is fairly uniform, with no indication of markings as in the previous species. The shell is much rounded anteriorly. Aperture pyriform. Labrum thin, simple. Labium moderately thick on the body.

Dimensions of type.—Length, 1.75; breadth, 6 mm.

Locality.—Kilcunda, in shell sand.

Observation.—This is the smallest of our Victorian species, and is immediately separable by its squat form, dome-shaped apex, and uniform colouration. Its nearest ally is *L. joshuana*, Gatliff and Gabriel, which is here refigured for comparison.

Type in Mr. C. J. Gabriel's collection.

Leiostraca styliformis, sp. nov. (Pl. XIV., Figs. 4 and 5).

Shell minute, acuminate, smooth, glassy. Whorls nine, through which the axial pillar may be plainly seen. Whorls are slightly convex; suture fairly distinct in consequence of the slight rounding of the whorls. The generic characteristic is indicated in the later whorls by fairly distinct, but irregular orange-tinted markings, more numerous and more pronounced on the body-whorl. Aperture somewhat pyriform, outer-lip thin and roundly prominent at the periphery. Inner lip slightly reflected.

Dimensions of type.—Length, 2.5; breadth, 8 mm.

Locality.—Dredged off Wilson's Promontory.

Observation.—A most delicate and curious little shell; its distinct acuminate form serving to distinguish from the Victorian members of the genus.

Type in Mr. C. J. Gabriel's collection.

Cyclostrema kilcundae, sp. nov. (Pl. XV., Figs. 8, 9 and 10).

Shell very minute, white, hyaline, of four whorls including the smooth globular protoconch. Discoidal, spire sunken, widely umbilicated. Ornamented with transverse riblets, about twenty-seven on the body-whorl, they are irregularly spaced, becoming more crowded towards the mouth, the intervening spaces are traversed by very fine encircling incised lines. Mouth circular.

Dimensions of type.—Height, .25; diameter, 1 mm.

Locality.—In shell sand, Kilcunda.

Observation.—Type in Mr. J. H. Gatliff's collection.

Cyclostrema vercoi, sp. nov. (Pl. XV., Figs. 11, 12 and 13).

Shell very minute, white, opaque, of four whorls including the protoconch. Discoidal, widely umbilicated, spire sunken. Whorls crossed by riblets, about seventeen on the last whorl, the intervening spaces are smooth with the exception of a median spiral thread on the base. Mouth circular.

Dimensions of type.—Height, .27; diameter, .75 mm.

Locality.—Dredged off Wilson's Promontory.

Observation.—Type in Mr. J. H. Gatliff's collection.

Myodora subalbida, sp. nov. (Pl. XV., Fig. 14).

Shell white, oblong, obliquely truncated posteriorly, rounded anteriorly, concentrically ridged, ridges somewhat rounded, regularly spaced; about fourteen in number. Umbos central, acute. The whole shell is covered by very fine radial striae, under the microscope this sculpture is divided into closely compacted elongate, flattened, hexagonal areas, angularly defined posteriorly, see figures 15 and 16. Right valve convex, with an angle extending from the umbos to the margin, and defining the truncated area. Left valve similar to the right valve, but rather deeper. Pearly inside.

Dimensions of type.—Length antero-posterior, 10.; umbo-ventral, 5.5 mm.

Locality.—Dredged in about seven fathoms, Western Port.

Observation.—Resembling *M. albida*, T. Woods, with which species *M. corrugata*, Verco, is conspecific. Dr. Verco has kindly compared our shell with his type and confirms our opinion that it is distinct from our new species.

Type in Mr. J. H. Gatliff's collection.

Dosinia victoriae, sp. nov. (Pl. XVI., Figs. 17, 18 and 19).

Shell cream-coloured, rather brittle, inaequilateral, the anterior side being the shorter. Umbods fairly prominent, slightly incurved, and situated at about one-third of the whole length from the anterior. The concentric sculpture resolves itself into about 65 excessively thin erect lamellae, the interstices of which are microscopically striate. The interstices are further sculpturd by fine obsolescent radial riblets which are not seen to ascend the lamellae, and are a little less frequent than the minute striae. Lunular area

of a brownish tinge, elongately-cordiform, medially elevated, and ornamented with imbricating lamellae. The ligament is sunken, narrow, and long. Hinge area normal. The pallial sinus is broad, well defined and obliquely ascending to about the centre of the valve. The surface of the shell has four sub-equally spaced rays of brown, arrow-shaped markings. Further colouration may be seen on the post-dorsal margin in four conspicuous brown maculations.

Dimensions of type.—Length, 36; breadth, 34; sectional of closed valves, 16 mm.

Locality.—Western Port, 5-10 fathoms type taken alive; dredged off Portsea, Port Phillip.

Observation.—Under the name of *D. variegata*, Gray, this species was recorded from Victoria by Pritchard and Gatliff, P.R.S., Vic., xvi. (new series), 1903, p. 133. Careful investigation and much correspondence leads us to the conviction that this is manifestly a wrongful identification; and, further, that the shell is an undescribed species. *D. variegata* is extremely variable; this variability with the figures and remarks by Reeve, Conch., Icon. vi. pl. 6, fig. 33a, and Sowerby Thes. Conch. II., pt. 13, p. 675, No. 72, pl. 144, fig. 83, excusably leading Pritchard and Gatliff to regard the Victorian shell as another of its forms. Close study, however, has revealed characters, sufficiently consistent to warrant our separating it as a distinct species. From *D. variegata*, the shell may be readily distinguished by its flatness (although in this respect showing slight variation), by its more elongated lunule and in the character of the radial sculpture. Another misapplied name is *D. histrio* (Gmel), var., an appellation recognised in South Australia. From typical *D. histrio* it is quite distinct as depicted in the well-executed figures, by Römer. Monograph Dosinia, p. 33, pl. vi. figs. 2, 3.

The "Challenger" Report Lamell. p. 152, records *D. histrio* (Gmel), var. from Cape York, Flinders Passage, and Arafura Sea, E. A. Smith, in his observations, remarking: "This species has received several names from various authors. It is the *Venus australis* of Quoy and Gaimard, the *Artemis variegata* of Reeve, *Artemis lirata* and *lenticularis* of Sowerby, and perhaps the *Artemis scabra* of Philippi. The specimens from station 187 (near Cape York) and Flinders Passage resemble the variety *Artemis lirata.*" Reference to Sowerby's figure of *Artemis lirata* Thes. Conch., pl. cxliv., fig. 85, clearly shows that our shell has been misunderstood in S. Australia. *D. deshayesi*, A. Ad., as figured in "Challenger"

Report Lamell. pl. 1, figs. 1—1*c*., the type of which is in the British Mus. of Nat. Hist., is somewhat similar. We deemed it advisable to have a comparative examination of our new species with it, and forwarded specimens to Mr. G. B. Sowerby, who replied as follows, 8-1-14:—"I examined type of *Dosinia deshayesi;* I can understand some of your small ones passing for the young of it, but is certainly a distinct species; its form is different, and it is flatter; the ligamentary area is much narrower, and the character of the concentric lamellae different. It is also certainly distinct from *D. histrio*, which runs into *variegata.* I think you may safely describe it as a new species." Further confusion has been added to the puzzle since one of us received from a South Australian correspondent a St. Vincent Gulf left valve under the name of *D. brazieri*; the author was not given, and diligent search through literature failed to reveal any description under such name; we conclude, therefore, that *D. brazieri* is manuscript.

A medium-sized specimen has been selected for the type. The series studied, ranging from 8 mm. to 45 mm. (paratype), exhibiting some slight variation in contour. The colour rays in some specimens are very clearly defined, while in others almost absent.

We have here to express our many thanks to Mr. F. Chapman for his excellent illustrations of the species.

Type and paratype in Mr. C. J. Gabriel's collection.

EXPLANATION OF PLATES.

Plate XIV.

Fig. 1.—Eulima victoriae, sp. nov.
Figs. 2 and 3.—Leiostraca kilcundae, sp. nov.
Figs. 4 and 5.—Leiostraca styliformis, sp. nov.
Figs. 6 and 7.—Leiostraca joshuana, Gatliff and Gabriel.

Plate XV.

Figs. 8, 9 and 10.—Cyclostrema kilcundae, sp. nov.
Figs. 11, 12 and 13.—Cyclostrema vercoi, sp. nov.
Fig. 14.—Myodora subalbida, sp. nov.
Fig. 15 and 16.—Myodora subalbida, sculpture magnified.
All of the above figures are variously magnified.

Plate XVI.

Figs. 17 and 18.—Dosinia victoriæ, sp. nov.
Fig. 19.—Dosinia victoriæ, paratype.
Figures natural size.